

REMARKS

Claims 1-21 are all the claims pending in the application.

As a preliminary matter, Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority and receipt of the certified copy of the priority documents. Applicants submit the changes to the specification as shown in the Appendix and in the drawings as shown in the Proposed Drawing Corrections of FIGS. 11A and 11B to obviate the Examiner's objections to the drawings. Applicants submit amended claim 15 as shown in the Appendix to correct the informality noted by the Examiner.

Claims 1-19 remain pending in the application. Claims 1-6, and 8-19 are rejected under 35 U.S.C. § 102(e) as being anticipated by Seino et al. (U.S. Patent No. 6,361,138) ("Seino"). Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Seino in view of Faoro (U.S. Patent No. 5,984,461) ("Faoro"). Claims 1-6, 8-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saruta (U.S. Patent No. 6,196,670) ("Saruta") in view of Nagoshi et al. (U.S. Patent No. 5,980,021) ("Nagoshi"). Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Saruta in view of Nagoshi, as applied to claim 1 above, and further in view of Faoro. Applicants submit the following arguments to traverse the prior art rejections.

Rejection of Claims Under § 102(e)

Claims 1-6 and 8-19 are rejected under §102(e) in view of Seino. Applicants submit the following arguments to traverse the rejection under § 102(e).

Applicants submit that amended claim 1 is patentable over Seino because Seino fails to teach each and every feature of claim 1. Specifically, claim 1 recites, in a combination with other elements, an ink cartridge for an ink-jet recording apparatus comprising:

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a positioning system which is formed in the vicinity of the electrodes and is adapted to engage a positioning member of said recording apparatus, wherein the positioning system contacts the positioning member. (emphasis added).

Nowhere in Seino is there any teaching of a positioning system as recited in claim 1.

Specifically, Applicants submit that the part labeled by the Examiner in the Office Action as the “protruded portion” of FIG. 3B is not a positioning system which is formed in the vicinity of the electrodes, as recited in claim 1. As shown in FIG. 3B, the protruded portions are located at the top right and left corners of the front face of the jet ink cartridge, away from and not in the vicinity of the electrodes 44. To the contrary, in Seino, the electrodes 44 are formed in the lower half of the front face of the jet ink cartridge, away from the protruded portions. Furthermore, nowhere in Seino is there any disclosure of a positioning system which contacts the positioning member, as recited in claim 1. Since the Examiner has not shown how the positioning system which is formed in the vicinity of the electrodes and which contacts the positioning member is inherently disclosed to one skilled in the art, Applicants submit that claim 1 is patentable.

Claims 2-6 and 8, which depend from claim 1, are believed to be patentable at least for the reasons discussed above for claim 1.

Applicants submit that amended claim 9 is patentable for similar reasons discussed above for claim 1. Specifically, Seino does not teach a positioning system which is formed in the vicinity of the electrodes.

Claims 10-19, which depend from claim 9, are believed to be patentable at least for the reasons discussed above for claim 9.

Rejections of Claims Under § 103(a)

Claim 7 is rejected under § 103(a) as being unpatentable over Seino in view of Faoro. For similar reasons to those discussed above for claim 1, Applicants submit that Faoro fails to make up for the deficiencies of Seino noted above and fails to provide a suggestion to combine Seino and Faoro to render claim 7 obvious. Specifically, the combination of Seino and Faoro fails to disclose or render obvious an ink jet cartridge for an ink-jet recording apparatus comprising a positioning system which is formed in the vicinity of the electrodes and is adapted to engage a positioning member of said recording apparatus, wherein the positioning system contacts the positioning member.

Alternatively or in addition, Applicants submit that the combination of Seino and Faoro is improper because the Examiner has failed to put forward a valid motivation to combine the teachings of Seino and Faoro. Examiner states that the motivation for the skilled artisan in combining Seino and Faoro is to gain the benefit of preventing the needle from causing damage. In Faoro, the blind hole inside the stopper 10 provides the benefit of preventing damage to a membrane 18 lining the tub 4. In Seino, however, there is no membrane or anything analogous to a membrane, and therefore, the blind hole as disclosed by Faoro would provide no benefit to Seino. Without the alleged benefit, a skilled artisan would not modify the invention of Seino with the blind hole of Faoro to render claim 7 obvious.

Claims 1-6, and 8-19 are rejected under § 103(a) as being unpatentable over Saruta in view of Nagoshi. The Examiner states that it would have been obvious to incorporate the protruding tank guide 20 and recess 15 disclosed by Nagoshi into the invention of Saruta so that

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the recess engages the tank guide in forming a positioning system. The Examiner further states that a skilled artisan would have been motivated to combine Saruta and Nagoshi to gain the benefit of achieving secure coupling of the ink supply path.

Applicants submit that the combination of Saruta and Nagoshi is improper because there is no motivation to combine Saruta and Nagoshi to render claim 1 obvious. To the contrary, Applicants submit that there is no motivation to combine because Saruta already discloses a device which “securely fixes the ink cartridge 107K to the cartridge attachment unit 18.” (col. 12, lines 35-36). There is no reason for a skilled artisan to incorporate the protruding tank guide 20 and recess 15 as disclosed by Nagoshi into the invention of Saruta.

Even if Saruta and Nagoshi were properly combined as proposed by the Examiner, the result would not meet the meets and bounds of claim 1 because both references fail to disclose a positioning system as recited in claim 1, namely a positioning system which is formed in the vicinity of the electrodes and is adapted to engage a positioning member of said recording apparatus, wherein the positioning system contacts the positioning member. In fact, the device disclosed by Nagoshi does not disclose an ink cartridge 2 having any electrodes as recited in claim 1. Therefore, Nagoshi does not disclose or provide motivation for the placement of the tank guide 20 and recess 15 in the vicinity of the electrodes disclosed by Saruta to render claim 1 obvious.

Claims 2-6 and 8, which depend from claim 1, are believed to be patentable at least for the reasons discussed above for claim 1.

Amended claim 9 is believed to be patentable for reasons similar to those discussed for claim 1. Specifically, the proposed combination of Saruta and Nagoshi fails to teach or provide

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motivation for a positioning system which is formed in the vicinity of the electrodes, in a combination with other elements of claim 1.

Claims 10-19, which depend from claim 9, are believed to be patentable at least for the reasons discussed above for claim 9.

Claim 7 is rejected under § 103(a) as being unpatentable over Saruta in view of Nagoshi, as applied to claim 1 above, and further in view of Faoro. Applicants submit that claim 7, which depends from claim 1, is patentable for at least the same reasons discussed above for claim 1.

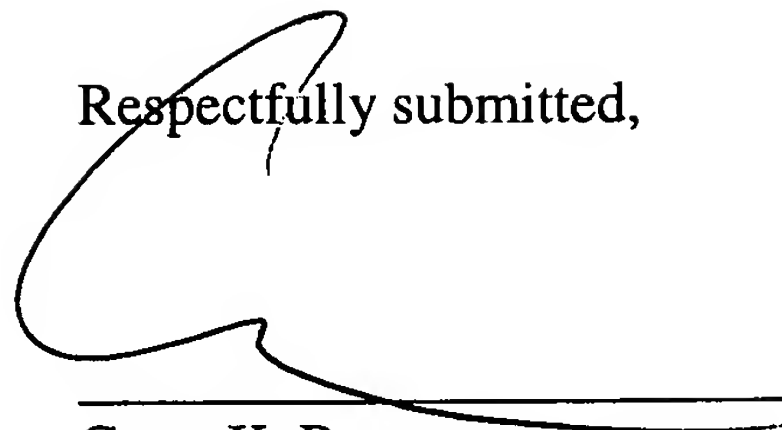
Claims 20 and 21 are believed to be patentable because the claims recite independently patentable subject matter in that the claims additionally recite the ink cartridge wherein the positioning system contact the positioning member to align the electrodes with respective contacts in at least two directions of a carriage moving direction, a paper feeding direction, and a vertical direction in a state in which the electrodes contact the contacts.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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